of patients treated with linezolid versus vancomycin were cured (69.6% versus 55.4%). Average total treatment cost was $14,268 for linezolid-treated patients versus $13,065 for vancomycin-treated patients, with an incremental ratio of $8429 per additional patient cured. Death rates were 20.4% for linezolid versus 35% for vancomycin, with an average 2.49 life-years gained per linezolid patient in a 65-year-old cohort (13.7 versus 11.2 years). The incremental cost per death avoided and per life year gained were $7299 and $482, respectively. To evaluate the robustness of findings sensitivity analyses were carried out modifying the value of several key variables. As a result of changing them suitably, the overall conclusions remained the same. **CONCLUSION:** From the Argentinean perspective, linezolid is cost-effective versus vancomycin in the treatment of nosocomial pneumonia due to suspected MRSA.

PIN9

ECONOMIC EVALUATION FOR THE ANTIMICROBIAL EMPIRIC TREATMENT OF HOSPITALIZED PATIENTS WITH VENTILATOR—ASSOCIATED PNEUMONIA DUE TO STAPHYLOCOCCUS AUREUS IN MEXICO

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OBJECTIVES: Ventilator—associated pneumonia (VAP) remains a significant cause of morbidity and mortality in Mexico. Development of VAP increases both the duration of intensive care unit (ICU) stay and hospitalization. The purpose of this study was to compare the cost—effectiveness ratios between four antimicrobial treatments for hospitalized adult patients with suspected or proven Gram-positive VAP due to Staphylococcus aureus in two ICUs of the Social Security Mexican Institute. **METHODS:** A decision tree model was developed using a Bayesian approach. The model simulated treatment of a hypothetical cohort of 1000 patients diagnosed with VAP during a time horizon of 12 weeks. Patients initiate treatment with one of four antimicrobial agents; linezolid, vancomycin, teicoplanin and imipenem. Conditional probabilities of the model were obtained from published clinical trials. Effectiveness measure was the clinical cure rate for patients with suspected or proven Staphylococcus aureus VAP. The analysis was conducted from the healthcare payer's perspective (only direct medical costs were used). Resource use and costs were obtained from hospital records and Mexican official databases. Probabilistic sensitivity analysis was performed and acceptability and health net benefits curves were constructed. **RESULTS:** Linezolid was associated with a shorter ICU stay and a higher clinical cure in comparison with vancomicyn, teicoplanin and imipenem ($p < 0.005$). Linezolid showed on the 12-weeks period the lowest expected average costs per patient treated (US$38,182.9) followed by vancomicyn (US$39,345.5) and imipenem (US$42,235). Linezolid also showed the highest clinical cure rate (57.4%) followed by vancomcyin (37.2%) and teicoplanin (32.1%). Results were robust to Monte Carlo first order sensitivity analysis. **CONCLUSIONS:** Despite its higher cost in the Mexican market, linezolid was cost—effective for treatment of VAP. These results should be taken into account by Mexican decision makers and clinicians in the management of patients with suspected or proven Gram-positive VAP due to Staphylococcus aureus.

PIN10

COST EFFECTIVENESS OF TIPRANAVIR IN TREATMENT-EXPERIENCED HIV PATIENTS IN THE USA

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OBJECTIVES: The non-peptidic protease inhibitor (PI) tipranavir boosted with ritonavir (TPV/r) has shown superior efficacy compared to investigator selected ritonavir-boosted comparator PI (CPI/r) in treatment experienced HIV 1 infected patients in the RESIST 1 and 2 clinical trials. TPV/r or CPI/r were administered with an optimized background regimen (OBR). In addition to the clinical efficacy of TPV/r, healthcare decision-makers will be interested in the cost-effectiveness of TPV/r. **METHODS:** A previously published 3-stage Markov model was modified to reflect US practice patterns for treatment-experienced HIV patients using 2005 costs and combined 48-week RESIST 1 and 2 trial data. The 12 model health states (HS) were defined by patients' CD4+ count and viral load, with cost and risk of AIDS defining events (ADEs) being linked to each HS. Cycle length was three months and transition through the model continued until 90% of patients had died. Disease progression beyond the 48-week trial data was based on HAART treatment experienced patients from the Medical University of South Carolina database. Costs were estimated from the payer perspective, including AWP drug prices and costs for patient monitoring and ADEs from SC Medicaid patients. **RESULTS:** TPV/r patients remained longer in HS defined by higher CD4+ count and lower viral load compared to CPI/r patients. This reduced the rate of ADEs (12.35% over 5 years) and resulted in 9.6 quality-adjusted life-months gained over the model time horizon. The incremental cost-effectiveness ratio (ICER) of TPV/r vs. CPI/r was $56,668 per QALY (discounted at 3%). Subgroup analysis of patients not treated with enfuvirtide as part of their OBR reduced the ICER to $49,467 per QALY. **CONCLUSIONS:** The ICER for TPV/r falls well within the $/QALY range of $50,000–$100,000 considered acceptable. Treating patients with TPV/r in earlier treatment regimes, not requiring augmentation with enfuvirtide, yielded an ICER below $50,000 per QALY.

PIN11

THE IMPACT OF MECHANICAL VENTILATION ON OUTCOMES AND COSTS IN NOSOCOMIAL PNEUMONIA

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OBJECTIVES: Nosocomial pneumonia (NP) is costly in terms of resource utilization and mortality. Patients with ventilator-associated pneumonia (VAP) have a higher risk of death than those with NP from other sources. The differences in risk and costs are attributable in part, to differences in the underlying pathogens. The purpose of this study is to characterize the outcomes and costs associated with NP, specifically examining the impact of mechanical ventilation. **METHODS:** We used Premier's 2003 hospital dataset for this study. These data originate from 1500 hospitals in the United States. Records with a non-missing admission code and a diagnosis of pneumonia sometime during the stay were retained. To restrict the sample to those with NP, records with a diagnosis of pneumonia at admission as well as those with an antibiotic on day one were deleted. CPT-codes were used to identify mechanical ventilation and text strings were searched to identify antibiotic therapy. Length of stay and costs were calculated by ward type. **RESULTS:** The final